Freeform Search

Database:	US Patents Full-Text Database US Pre-Grant Publication Full-Text Database JPO Abstracts Database EPO Abstracts Database Derwent World Patents Index IBM Technical Disclosure Bulletins
Term:	L1 and cach\$3
Display: Generate:	Documents in <u>Display Format</u> : - Starting with Number 1 O Hit List
•	Search Clear Help Logout Interrupt
Main	Menu Show S Numbers Edit S Numbers Preferences Cases
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DATE: Tuesday, March 05, 2002 Printable Copy Create Case

Set Name		Hit Count	
DB=US		result set	
<u>L18</u>	L1 and cach\$3	12	<u>L18</u>
<u>L17</u>	L13 same (reservation)	1	<u>L17</u>
<u>L16</u>	L13 and (airline or flight)	20	<u>L16</u>
<u>L15</u>	L13 and l10	0	<u>L15</u>
<u>L14</u>	L13 and l1	0	<u>L14</u>
<u>L13</u>	cach\$3 same (recent or updated or up-to-date or current) same (stale or obsolete or outdated or old)	765	<u>L13</u>
<u>L12</u>	L11 not 17	29	<u>L12</u>
<u>L11</u>	110 same (availab\$7 or free or vacan\$3)	47	<u>L11</u>
<u>L10</u>	airline same (seat\$3 or reservation) same (current or up-to-date or updated)	133	<u>L10</u>
<u>L9</u>	L7 not 15	15	<u>L9</u>
<u>L8</u>	L7 not 16	30	<u>L8</u>
<u>L7</u>	L1 same (up-to-date or current\$2 or recent\$2)	31	<u>L7</u>
<u>L6</u>	5897620[uref]	8	<u>L6</u>
<u>L5</u>	L2 same (up-to-date or current\$2 or recent\$2)	16	<u>L5</u>
<u>L4</u>	L2 same (up-to-date or current\$2 or recent\$2)	16	<u>L4</u>
<u>L3</u>	L1 same cach\$3	0	<u>L3</u>
<u>L2</u>	airline with seat with (availab\$7 or free or vacan\$3)	75	<u>L2</u>
<u>L1</u>	airline same seat same (availab\$7 or free or vacan\$3)	182	<u>L1</u>

END OF SEARCH HISTORY

Generate Collection Print

L5: Entry 4 of 16

File: USPT

Jul 17, 2001

US-PAT-NO: 6263315

DOCUMENT-IDENTIFIER: US 6263315 B1

TITLE: Revenue management system and method

DATE-ISSUED: July 17, 2001

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

Talluri; Kalyan

Millwood

ŊJ

ASSIGNEE-INFORMATION:

NAME

CITY

STATE ZIP CODE COUNTRY

TYPE CODE

Pricing Research Corporation

Millwood

02

APPL-NO: 9/ 184234 [PALM] DATE FILED: November 2, 1998

INT-CL: [7] $\underline{G06} + \underline{17/60}$

US-CL-ISSUED: 705/8; 705/6, 705/5, 705/10 US-CL-CURRENT: 705/8; 705/10, 705/5, 705/6

FIELD-OF-SEARCH: 705/28, 705/6, 705/8, 705/5, 705/10, 340/5, 340/6, 340/8, 340/10,

340/20, 340/26, 340/28, 340/825.28, 703/6, 707/1, 709/100

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

DAM NO	TOOLIN DAMP	DAMENIMED NAME	HC CI
PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
2542890	February 1951	Basu et al.	
2883106	April 1959	Cornwell et al.	
4862357	August 1989	Ahlstrom et al.	
5255184	October 1993	Hornick et al.	
5270921	December 1993	Hornick	
5404291	April 1995	Kerr et al.	
5652867	July 1997	Barlow et al.	
5897620	April 1999	Walker et al.	
5918209	June 1999	Campbell et al.	
6897620	April 1999	Walker et al.	

ATTY-AGENT-FIRM: Jones, Tullar & Cooper PC

ABSTRACT:

A revenue management software system supports decisions to accept or deny requests for resource capacity (seats, rooms, volume/weight, air time, etc.) using control logic that accesses multidimensional lookup tables of price values for each resource (flight leg, hotel day, etc.). Each dimension of each lookup table corresponds to a variable that affects the value for the resource. As an example where the resource is airline seating capacity for a given flight itinerary, a two-dimensional threshold value table is employed for each flight leg in the itinerary where the first dimension specifies the current time slot and the other dimension the current number of reservations accepted (reservation level) for the flight leg. A request for a seat on the flight is accepted if and only if its net revenue exceeds or equals the sum of the current table values (i.e. the table entries corresponding to the current time and current reservation level) for each requested flight leg.

20 Claims, 5 Drawing figures

3/5/02 7:57 PM

Generate Collection Print

L5: Entry 7 of 16

File: USPT

Oct 17, 2000

US-PAT-NO: 6134534

DOCUMENT-IDENTIFIER: US 6134534 A

TITLE: Conditional purchase offer management system for cruises

DATE-ISSUED: October 17, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Ridgefield Walker; Jay S. CT Sparico; Thomas M. Riverside CT Case; T. Scott Darien CT Schneier; Bruce Minneapolis MN

ASSIGNEE-INFORMATION:

TYPE CODE CTTV STATE ZIP CODE COUNTRY NAME

Stamford CT 02 priceline.com Incorporated

APPL-NO: 8/ 923618 DATE FILED: September 4, 1997

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This application is a continuation-in-part of U.S. patent application Ser. No. 08/889,319, filed Jul. 8, 1997, which is a continuation-in-part of U.S. patent application Ser. No. 08/707,660, filed Sep. 4, 1996 now U.S. Pat. No. 5,794,207, each incorporated by reference herein. The present invention is related to the following United States Patent Applications filed contemporaneously herewith: "Conditional Purchase Offer Management System for Packages, "U.S. patent application Ser. No. 08/923,683 (Attorney Docket No. WD2-97-065); "Conditional Purchase Offer Management System for Telephone Calls," U.S. patent application Ser. No. 08/923,317 (Attorney Docket No. WD2-97-028); "Conditional Purchase Offer Management System for Event Tickets," U.S. patent application Ser. No. 08/923,530 (Attorney Docket No. WD2-96-081); and "Conditional Purchase Offer and Third-Party Input Management System, "U.S. patent application Ser. No. 08/923,524 (Attorney Docket No. WD2-97-067), each assigned to the assignee of the present invention and incorporated by reference herein.

INT-CL: [7] $\underline{G06} + \underline{15/20}$

US-CL-ISSUED: 705/26; 705/5, 705/37 US-CL-CURRENT: 705/26; 705/37, 705/5

FIELD-OF-SEARCH: 705/26-27, 705/5, 705/13, 705/15, 705/37, 705/35, 295/226, 295/228,

295/236, 295/237, 295/239, 340/825.3

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL Search Selected

Carlsen, Clifford, "From Airline Tickets to Human Organs, the Electronic Markets Are Booming"San Francisco Business Times, Aug. 14, 1989 at p. 17.

"Public May Submit Bids To Get Bargins Rates", Wall Street Journal, Section 2: p. 1, Column 1; Aug. 1, 1989.

American Airlines Internet Silent Auction, selected pages downloaded from www.americanair.com.

Apollo Host Computer, selected pages downloaded from www.appollo.com.

"Auctioning unsold airline tickets." (http://www.newciv.org./GIB/BOV-409.HTMI), at p. 1

Cathay Pacific:CyberTraveler Auction #3 --Official Rules, selected pages downloaded from www.cathaypacific.com.

CMS Online: About Collector's Super Mall downloaded from www.csmonline.com. Sabre Decision Technologies, selected pages downloaded from www.sabre.com. PhoneMiser: Frequently Asked Questions, downloaded from www.phonemiser.com. The United Computer Exchange: How It All Works, selected pages downloaded from www.uce.com.

Tired of Shopping For the Best Home Loan?, Mortgage Loan Specialists. Koepper, Ken, "Room Inventory Auctioning: The Next CRS Generation", Lodging, Jan. 1990 at p. 26, 29-30.

ART-UNIT: 275

PRIMARY-EXAMINER: MacDonald; Allen R. ASSISTANT-EXAMINER: Caudle; Penny

ATTY-AGENT-FIRM: Morgan & Finnegan, L.L.P. Brandt; Jeffrey L.

ABSTRACT:

A conditional purchase offer (CPO) management system is disclosed for receiving CPOs from one or more customers, such as cruise and airline passengers, and for evaluating the received CPOs against a number of CPO rules defined by a plurality of sellers, such as cruise operators and airlines, to determine whether any seller is willing to accept a given CPO. A CPO is a binding offer containing one or more conditions submitted by a customer for purchase of an item, such as airline travel, at a customer-defined price. A CPO rule is a set of restrictions defined by a given seller, such as a cruise operator or an airline, to define a combination of restrictions for which the seller is willing to accept a predefined price. The CPO rules may be securely stored by one or more servers. The CPO management system permits a seller to correct for forecasting errors, if necessary, or other competitive forces which have produced excess capacity, by providing inventory for sale to CPO customers. If a CPO is accepted by more than one seller, the CPO management system executes a post-sell multi-bind process to permit each accepting seller to directly market to the customer and post-sell their product. Thus, the customer selects for himself which seller acceptance to utilize, based on materials furnished by each seller. The CPO management system may optionally also provide a CPO which specifies preferred sellers to the excluded sellers who may make counteroffers to the customer, in an attempt to obtain the business, before one of the specified sellers accepts the CPO.

12 Claims, 34 Drawing figures

Generate Collection Print

L5: Entry 8 of 16

File: USPT

Aug 29, 2000

US-PAT-NO: 6112185

DOCUMENT-IDENTIFIER: US 6112185 A

TITLE: Automated service upgrade offer acceptance system

DATE-ISSUED: August 29, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Walker; Jay S. Ridgefield CT Jindal; Sanjay K. Wilton CT

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Walker Digital, LLC Stamford CT 02

APPL-NO: 8/ 885570 [PALM]
DATE FILED: June 30, 1997

INT-CL: [7] G06 F 19/00

US-CL-ISSUED: 705/5; 705/6 US-CL-CURRENT: 705/5; 705/6

FIELD-OF-SEARCH: 705/5, 705/6, 705/13, 705/15, 340/825.28, 340/825.29

Search Selected

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4752876	June 1988	Couch et al.	705/5
4845625	July 1989	Stannard	
5237499	August 1993	Garback	
5253166	October 1993	Dettlebach et al.	705/5
5255184	October 1993	Hornick et al.	705/6
5285383	February 1994	Lindsey et al.	
5311425	May 1994	Inada	705/6
5404291	April 1995	Kerr et al.	705/5
5732398	March 1998	Tagawa	705/5
5797126	August 1998	Helbling et al.	705/5

D'Ambrosio, Richard "Keep Alert For Ways To Upgrade At Discount" Business and Travel News n 202, 26 Apr. 1991.

WebFlyer FAQ Webpage (http://www.webflyer.com/@faq/upgrade.htm#upgrade1 Dec.1998. Carol Smith, "LAX; Getting Out; The Art of the Upgrade", Los Angeles Times, Nov. 15, 1995 at p. 14.

"TravelBids"(http://www.travelbids.com), download date; Mar. 31, 1997.
"Cathay Pacific CyberTraveler Auctions" (http://www.cathay-usa.com/auction), download date: Apr. 4, 1997.

"American Airlines' Silent AAuction" (http:///www2.amrcorp.com/auction/rules.html), download date: Apr. 7, 1998 .

ART-UNIT: 275

PRIMARY-EXAMINER: Stamber; Eric W. ASSISTANT-EXAMINER: Caudle; Penny

ATTY-AGENT-FIRM: Vogel; Peter J. Alderucci; Dean

ABSTRACT:

An automated service upgrade offer acceptance system is provided for receiving (i) reservations for a selected category of assigned services, such as seating, and (ii) offers for upgraded services, such as an upgrade of an initially selected category of seating to a preferred seating category, from confirmed customers. The automated service upgrade acceptance system permits customers to submit offers for a number of upgraded services or upgrade offer items, including offers for an upgrade of an initial category of seating to a different seating category, including premium seats within a given category of seating, as well as other premium services, such as priority for special meals or drinks, priority for receipt of luggage upon deplaning, and discount companion tickets. The automated service upgrade acceptance system allows a customer to place a binding offer for an upgraded offer item, should the item become available. Offers for upgraded services can be accepted by the automated service upgrade acceptance system at any time during a seller-defined offer acceptance period, from the time of making a reservation, up to a predefined expiration period. The automated service upgrade acceptance system processes the received offers for upgraded services, at one or more intervals until an offer acceptance period expires, to determine whether to accept or reject each offer for an upgraded service and thereafter notify the customers of any revised seating assignments. The received offers for each different upgrade offer item are preferably processed in a predefined sequence, such that offers for the highest categories of seating are processed first. The automated service upgrade acceptance system can enhance the value of offers in accordance with seller-defined criteria for preferred customers, such as frequent flyers, or in accordance with a promotional offer.

84 Claims, 11 Drawing figures

Generate Collection Print

L12: Entry 10 of 29

File: USPT

Jul 4, 2000

US-PAT-NO: 6085164

DOCUMENT-IDENTIFIER: US 6085164 A

TITLE: Apparatus and method of allocating flight inventory resources based on the

current market value

DATE-ISSUED: July 4, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Smith; Barry Craig Flower Mound TX
Balakrishnan; Vinod Colleyville TX
Green; Richard Wenman Pennefather Dallas TX

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

Sabre Inc. Fort Worth TX 02

APPL-NO: 8/ 810468 [PALM]
DATE FILED: March 4, 1997

PARENT-CASE:

This application is a continuation of application Ser. No. 08/688,554 filed Jul. 30, 1996, now abandoned, which is a continuation of application Ser. No. 08/120,800 filed Sep. 15, 1993 abandoned Mar. 27, 1997.

INT-CL: [7] G06 F 17/60

US-CL-ISSUED: 705/5; 705/6, 705/10 US-CL-CURRENT: 705/5; 705/10, 705/6

FIELD-OF-SEARCH: 705/3, 705/5, 705/6, 705/8, 705/10, 340/825.28, 340/825.29, 709/200, 709/216, 709/217, 709/218, 709/227, 709/219, 707/2, 707/3, 707/4, 707/5, 707/9, 707/10

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
<u>4775936</u>	October 1988	Jung	
5255184	October 1993	Hornick et al.	
5262942	November 1993	Earle	
5270921	December 1993	Hornick	
5369570	November 1994	Parad	

Search Selected

Belobaba, Application of a Probabilistic Decision Model to Airline Seat Inventory Control, Operations Research, vol. 37, No. 2, pp. 183-197, Apr. 1989. Feldman, Joan, "What's a revenue manager to do?", Air Transport World, vol. 30, No. 8, pp. 78-79, Aug. 1993. Anonynous, "Control Data's Optix helps airlines to maximize discount yields. (software

package) ", Travel Weekly, vol. 46, p. 27, Aug. 31, 1987.

ART-UNIT: 271

PRIMARY-EXAMINER: Lintz; Paul R.

ASSISTANT-EXAMINER: Kalinowski; Alexander

ATTY-AGENT-FIRM: Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P.

ABSTRACT:

The present invention relates to an inventory control method and architecture that maximizes revenues derived from the sale of a given inventory resource to a customer. More particularly, the present invention uses a continuous nested execution environment that allows a determination of a minimum acceptable price by continuously computing an optimal sale price based on current demand and supply and expected cancellations. The method described accesses a centrally located information repository and retrieves an inventory resource type and value allowing requests below the minimum acceptable price to be rejected, while requests above the minimum acceptable price can be accepted thus allowing the resource provider to maximize incoming revenues from the sale of its inventory of reservations.

22 Claims, 8 Drawing figures

Generate Collection

Print

L9: Entry 2 of 15

File: USPT

Sep 7, 1999

US-PAT-NO: 5948040

DOCUMENT-IDENTIFIER: US 5948040 A

TITLE: Travel reservation information and planning system

DATE-ISSUED: September 7, 1999

INVENTOR-INFORMATION:

NAME

CITY

STATE

ZIP CODE

COUNTRY

DeLorme; David M.

Yarmouth

ME

Gray; Keith A.

Dresden

ME ME

Ferguson; T. Angus

Portland

ASSIGNEE-INFORMATION:

NAME

CITY

STATE ZIP CODE

COUNTRY

TYPE CODE

DeLorme Publishing Co.

Yarmouth ME

0.2

APPL-NO: 8/ 797471 [PALM]
DATE FILED: February 6, 1997

PARENT-CASE:

CROSS-REFERENCE TO RELATED APPLICATIONS This patent application is a continuation-in-part (CIP) of the David M. DeLorme et al. U.S. patent application Ser. No. 08/661,600 filed Jun. 11, 1996, for COMPUTER AIDED ROUTING AND POSITIONING SYSTEM, now U.S. Pat. No. 5,802,492 which is a CIP of the David M. DeLorme et al. U.S. patent application Ser. No. 08/381,214 filed Jan. 31, 1995 for COMPUTER AIDED ROUTING SYSTEM, now U.S. Pat. No. 5,559,707, issued Sep. 24, 1996, which is a CIP of the David M. DeLorme et al. U.S. patent application Ser. No. 08/265,327 filed Jun. 24, 1994 for COMPUTER AIDED MAP LOCATION SYSTEM now abandoned. This patent application is also a CIP of the Keith A. Gray U.S. patent application Ser. No. 08/521,828 filed on Aug. 31, 1995, for COMPUTERIZED ADDRESS LOCATION AND COMMUNICATION SYSTEM now abandoned. All of the cross-referenced applications have a common assignee who is the assignee of the present application. The contents of these related patent applications are incorporated herein by reference.

INT-CL: [6] G06 F 19/00, G01 C 21/00

US-CL-ISSUED: 701/201; 701/208, 701/211, 340/990, 705/5 US-CL-CURRENT: 701/201; 340/990, 701/208, 701/211, 705/5

FIELD-OF-SEARCH: 701/201, 701/202, 701/207, 701/208, 701/209, 701/211, 701/212, 701/213, 705/5, 705/6, 340/988, 340/989, 340/990, 340/995

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4359631	November 1982	Lockwood et al.	360/12
4862357	August 1989	Ahlstrom et al.	705/6
4926336	May 1990	Yamada	364/444
5021953	June 1991	Webber et al.	705/6
5172321	December 1992	Ghaem et al.	701/202
5191523	March 1993	Whitesage	705/6
5208756	May 1993	Song	364/449
5231584	July 1993	Nimura et al.	364/444
5237499	August 1993	Garback	705/5
5243528	September 1993	Lefebvre	701/211
5253166	October 1993	Dettebach et al.	705/5
5272638	December 1993	Martin et al.	701/202
5331546	July 1994	Webber et al.	705/6
5353034	October 1994	Sato et al.	340/988
5359527	October 1994	Takanabe et al.	364/449
5369588	November 1994	Hayami et al.	701/209
5422809	June 1995	Griffin et al.	705/5
5444618	August 1995	Seki et al.	364/420
5519619	May 1996	Seda	701/201
5537324	July 1996	Nimura et al.	364/449
5587911	December 1996	Asano et al.	364/444.2
5724520	March 1998	Goheen	705/5

Makulowich, John, "Traveling by Virtual Reservation," Washington Technology, Jan. 23, 1997, p. 42.

Knecht, Bruce, G., "Microsoft Puts Newspapers in Highanxiety.com," The Wall Street Journal, Jul. 15, 1996, pp. B1, B10.

"InforTravel Expands Service," Business Geographics, vol. 4, No. 6, Jun., 1996, p. 13. DelRosso, Laura, "Firm Customizes Internet Res Link," Travel Weekly, vol. 55, No. 26, Apr. 1, 1996, pp. 43-44, 47.

"Casto Travel's Resource Library," www.casto.com.

ART-UNIT: 361

PRIMARY-EXAMINER: Nguyen; Tan

ATTY-AGENT-FIRM: Atwood; Pierce Caseiro; Chris A.

ABSTRACT:

Computerized travel reservation information and planning system that generates "map ticket" output in various media, for guidance and transactions en route. Such print or electronic documents can include bar or alphanumeric codes for automated recognition and/or access. WHERE?, WHO/WHAT?, WHEN? and HOW? menus enable flexible user inquiries accessing selectable geographic, topical, temporal and transactional data records and relational processing. Sub-menus provide further capabilities: e.g. routing, topical searching; searches of events calendars, almanacs, appointment books, related itinerary

[&]quot;Sunnyside Computing, Inc.," www.itn.net.

scheduling; trip budgeting issues, plus travel arrangement availabilities or other goods/services offers. Online communications links access updated or supplemental information on places, times, topics and other provider goods/service offers. Online computer-aided routing system enables input of selectable travel origin, destination, and waypoints to compute travel routes, available transportation services, costs, options, and schedules. A point-of-interest database lets users pick types of attractions or accommodations within a user-selected region around routes of travel. Users engage in an iterative planning process, revising or editing travel plans, previewing travelogs of alternate routes, selecting point of interest parameters, comparing times and costs of transportation options, in order to achieve a satisfactory travel plan. The system provides printed or electronic output that may include any one or more of text itinerary, ordered set of travel maps, customized collection of information on points of interest information and a selected array of valid reservation confirmations, tickets and/or discount coupons coded with elements for automated recognition and processing. Mobile users, including GPS-linked users, can access the system via wireless communication units.

80 Claims, 16 Drawing figures

Generate Collection Print

L12: Entry 21 of 29

File: USPT

Oct 29, 1996

US-PAT-NO: 5570283

DOCUMENT-IDENTIFIER: US 5570283 A

TITLE: Corporate travel controller

DATE-ISSUED: October 29, 1996

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY Shoolery; John R. Palo Alto CA Pasela; Guy E. Davis CA De La Torre; Diane L. San Bruno CA Leung; Kenneth M. San Jose CA Morris; Kathleen A. Saratoga CA

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

TravelNet, Inc. Santa Clara CA 02

APPL-NO: 8/ 342348 [PALM]
DATE FILED: November 18, 1994

INT-CL: [6] G06 F 153/02

US-CL-ISSUED: 364/407; 364/401R US-CL-CURRENT: 705/5; 707/1

FIELD-OF-SEARCH: 364/401-402, 364/403, 364/406, 364/408, 340/825.28, 395/200, 395/650, 395/275, 395/500, 395/600, 395/800, 395/916, 395/934, 379/90, 379/355, 379/356,

370/80.5, 370/80.6

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL

PAT-NO ISSUE-DATE

PATENTEE-NAME

US-CL

5237499

August 1993

Garback

364/407

OTHER PUBLICATIONS

"Covia Adds Customization Tools Access Co.", Business Travel News, May 7, 1997 p. 12. Dialog File 16, Acc. No. 725978 2.

"Sun Will Shine Thru Windows, (Sun Microsystems: Automates business travel management process", Business Travel News Jul. 6, 1992 p. A4, Dialog file 16, Acc No. 73932882. Belitsos, Byron, "MIS pilots the air wars (includes related article on Covia Corp's distributed Apollo reservations system)" Computer & Communications Decisions, V27, N3, p. 36(6); Mar. 1988, Dialog Acc. No. 73573165.

"Netwise RPC Tool: Distributed Applications with Less Pain Netwise: Lanuches RPC

distributing application tool" Network computing Maruch, 1991 p. 16.
"Playing by the Rules: How Zenith Travel is using the new CRS regulations to develop better automation" Travel Agent, Jun. 28, 1993, p. 87, Dialog File 16 Acc. No. 04523256.

"Going Mobile: SABRE's LANLink offers home agents complete flexibility to use office LAN programs" Travel Agent Mar. 7, 1994, p. 60, Dialog File 16 Acc. No. 04971977. "Working Knowledge: Technology will dictate the continuing evolution of the role of agents and stimulate travel by informed consumers", Travel Agent, Mar. 21, 1994, p. 34; Dialog File 16 Acc. No. 05005272.

"Reservation Legacy (Unix-based reservations systems are discussed)", UNIX News, Jun. 1994, p. 17 Dialog File 16, Acc. No. 05141282.

"Upgrading the System", Travel Agent, Jan. 10, 1994, p. 50. Dialog, File 16, Acc. No. 04883418.

ART-UNIT: 241

PRIMARY-EXAMINER: McElheny, Jr.; Donald E.

ASSISTANT-EXAMINER: Poinvil; Frantzy

ATTY-AGENT-FIRM: Pillsbury Madison & Sutro LLP

ABSTRACT:

A system for controlling travel primarily in a corporate environment that interconnects travelers, travel agents and airline CRSs so that a traveler can communicate with the CRS with a user friendly GUI to obtain schedule information and transfer such to a travel agent, the travel agent can use the selected schedule information for ticketing and to assure the lowest cost while the entire trip information is stored locally for management control. The system includes multiple connects to the CRS to overcome data transfer limitations specific to airline CRSs.

27 Claims, 4 Drawing figures

Generate Collection

Print

L16: Entry 19 of 20

File: USPT

Feb 6, 1996

US-PAT-NO: 5490261

DOCUMENT-IDENTIFIER: US 5490261 A

TITLE: Interlock for controlling processor ownership of pipelined data for a store in

cache

DATE-ISSUED: February 6, 1996

INVENTOR-INFORMATION:

CITY	STATE	ZIP	CODE	COUNTRY
New Paltz	NY			
Poughkeepsie	NY			
Wappingers Falls	NY			
Hopewell Junction	NY			
Poughkeepsie	NY			
Poughkeepsie	NY			
Poughkeepsie	NY			
	New Paltz Poughkeepsie Wappingers Falls Hopewell Junction Poughkeepsie Poughkeepsie	New Paltz NY Poughkeepsie NY Wappingers Falls NY Hopewell Junction NY Poughkeepsie NY Poughkeepsie NY	New Paltz NY Poughkeepsie NY Wappingers Falls NY Hopewell Junction NY Poughkeepsie NY Poughkeepsie NY	New Paltz Poughkeepsie Wappingers Falls Hopewell Junction Poughkeepsie NY Poughkeepsie NY NY

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE International Business Machines Corporation Armonk NY 02

APPL-NO: 7/ 680176 [PALM]
DATE FILED: April 3, 1991

INT-CL: [6] $\underline{G06} \ \underline{F} \ \underline{12/08}, \ \underline{G06} \ \underline{F} \ \underline{12/00}$

US-CL-ISSUED: 395/448; 395/457, 395/462, 395/470, 395/471, 395/472, 395/496, 364/243.45, 364/231.8, 364/246.8, 364/246.5, 364/243.41, 364/DIG.1
US-CL-CURRENT: 711/121; 711/130, 711/135, 711/143, 711/144, 711/145, 711/169

Search Selected

FIELD-OF-SEARCH: 395/425, 395/448, 395/457, 395/462, 395/471, 395/472, 395/496

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4622631	November 1986	Frank et al.	395/800
5265232	November 1993	Gannon et al.	395/425
5276848	January 1994	Gallagher et al.	395/425
5276852	January 1994	Callander et al.	395/425
5317720	May 1994	Stamm et al.	395/425

ART-UNIT: 232

PRIMARY-EXAMINER: Rudolph; Rebecca L. ASSISTANT-EXAMINER: Bragdon; Reginald G. ATTY-AGENT-FIRM: Goldman; Bernard M.

ABSTRACT:

Insures data integrity in process ownership indications by providing an ownership interlock on the data units in a pipeline to a store-in type of cache. An ownership interlock prevents any processor ownership change to occur (i.e. exclusive or readonly ownership) for a cache data unit until all outstanding stores have been made in the cache data unit, after which the ownership may be changed. An ownership change may be signalled by a cross-invalidate (XI) signal to a processor. Outstanding stores are received by the pipeline after the stores are completed by a processor, and the outstanding stores output from the pipeline into a store-in cache. A continuous flow of stores is enabled into and out of the pipeline to expedite a change of ownership requested of a data unit in the cache. The continuous flow avoids having to stop a processor from putting stores into the pipeline and avoids forcing all outstanding stores out of the pipeline into the cache before indicating a change of processor ownership.

12 Claims, 8 Drawing figures

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L18: Entry 11 of 12

File: USPT

Nov 9, 1993

US-PAT-NO: 5261069

DOCUMENT-IDENTIFIER: US 5261069 A

TITLE: Method of maintaining consistency of cached data in a database system

DATE-ISSUED: November 9, 1993

INVENTOR-INFORMATION:

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TYPE CODE

02

Hewlett-Packard Company Palo Alto CA

APPL-NO: 7/ 566732 [PALM]
DATE FILED: August 13, 1990

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US-CL-ISSUED: 395/425; 395/600, 364/DIG.2, 364/974, 364/969, 364/969.2, 364/964,

364/964.2

US-CL-CURRENT: 711/145; 707/8

FIELD-OF-SEARCH: 364/2MSFile, 364/9MSFile, 395/425, 395/400, 395/600

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected

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PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
4755930	July 1988	Wilson, Jr. et al.	364/200
4775955	October 1988	Liu	364/900
4897782	January 1990	Bennett et al.	395/600
4965719	October 1990	Shoens et al.	395/650
5029169	July 1991	Smyk	371/19
5055999	October 1991	Frank et al.	364/200
5077658	December 1991	Bendert et al.	395/600
5091846	February 1992	Sachs et al.	395/250
5113514	May 1992	Albonesi et al.	395/425
5140685	August 1992	Sipple et al.	395/425
5161227	November 1992	Dias et al.	395/725

"VAXclusters: A Closely-Coupled Distributed System", by Kronenberg, N. P., Levy, H. M., Strecker, W. D.; ACM Transactions on Computer Systems, vol. 4, No. 2, May 1986, pp. 130-146.

"Integrated Concurrency-Coherency Controls for Multisystem Data Sharing", by Dias, D. M., Balakrishna, R. I., Robinson, J. T. and Yu, P. S.; IEEE Transactions on Software Eng., vol. 15, No. 4, Apr. 1989, pp. 437-448.

ART-UNIT: 232

PRIMARY-EXAMINER: Rudolph; Rebecca L.

ABSTRACT:

A method of maintaining the consistency of <u>cached</u> data in a client-server database system. Three new locks--a <u>cache</u> lock, a pending lock and an out-of-date lock--are added to a two-lock concurrency control system. A new long-running envelope transaction holds a <u>cache</u> lock on each object <u>cached</u> by a given client. A working transaction of the client works only with the <u>cached</u> object until commit time. If a second client's working transaction acquires an "X" lock on the object the <u>cache</u> lock is changed to a pending lock; if the transaction thereafter commits the pending lock is changed to an out-of-date lock. If the first client's working transaction thereafter attempts to commit, it waits for a pending lock to change; it aborts if it encounters an out-of-date lock; and otherwise it commits.

17 Claims, 8 Drawing figures